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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,959	03/19/2004	Yoshikazu Kitajima	1131-0505PUS1	6483
2292	7590	02/23/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CHUNG TRANS, XUONG MY	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,959

Applicant(s)

KITAJIMA, YOSHIKAZU

Examiner

Xuong M. Chung-Trans

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/8/04; 3/19/04</u> | 6) <input type="checkbox"/> Other: _____ |

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1. This application has been examined. Claims 1-6 are pending in this application.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

not 3. Claims 1, 3-4 and ⁵⁻6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (4,332,430) in view of Kobayashi (4,907,991).

As per claim 1, Clark discloses in figs. 1-7 a tab terminal adapted to be mounted on a printed circuit board, comprising: a plate-like tab terminal body 10; an extension portion 2 formed integrally with the tab terminal body so as to extend from one end edge of the tab terminal body in a longitudinal direction of the tab terminal body, the extension portion being adapted to be connected with an electrical connecting part 11; first and second side wall portions 16 formed integrally with the tab terminal body so as to extend from opposite side edges of the tab terminal body in a height direction of the tab terminal, respectively; and first and second contact portions 17 formed integrally with the first and second side wall portion 16. Clark does not teach that the first and second contact portions extend from distal end edges of the first and second side wall portions in substantially parallel to the tab terminal body, respectively, the tab terminal 10 being fixedly connected at the first and second contact portions to the printed circuit board 20. Clark does teach that the contact portions 17 connected to the PCB 20 via thru hole. Kobayashi, however, discloses such contact portions 3 extend from the side wall

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portions in substantially parallel to the tab terminal body 2 and the contact portions connected to the PCB (7,8). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include the teaching of Kobayashi in the Clark connector in order to have surface mounted instead of thru hole mounted and thereby providing for easy assembly without drilling hole in the PCB and also reduce cost.

As per claim 2 Clark and Kobayashi discloses the invention as claimed except for said first and second contact portions extend at an angle slightly smaller than right angles with respect to said first and second side wall portions, respectively. However, it would have been obvious to one skilled artisan at the time the invention was made to provide the contact portions extent at an angle by bending the contact portions upward to form an angle as claimed so that to increase the surface area contact between the solder and the base of the contact than would be with a flat base and thereby increase the solder bond strength.

As per claims 3- 6, Clark discloses that the said extension portion of the tab terminal is formed so that a receptacle terminal 13,14,41,43 serving as the electrical connecting part 11 is fitted to said extension portion; said first and second contact portions 16,17 are soldered to solder portions of a conductor pattern 47 formed in the printed circuit board 20, respectively, said tab terminal body is formed with a picked-up portion (23) to which a pickup of a mounter (screw driver tool) is accessible; and wherein said first and second side wall portions 16 have a height dimension such that a gap is formed between a surface of the printed circuit board (a gap between a surface of PCB and the bottom surface of the tab terminal) to which the tab terminal is mounted

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and an adjacent surface of the electrical connecting part connected to the extension portion of the tab terminal.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (571) 272-2002. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 extension 33.. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



X. Chung-Trans



HIEN VU
PRIMARY EXAMINER